

## Math Teacher Practices and Students' Attitudes & Behavior

### What is the study about?

The study looked at the relationship between 4<sup>th</sup> and 5<sup>th</sup> teachers' emotional support and classroom organization and students' performance on math tests, behavior in class, and self-efficacy in math. The goal was to understand what teachers can do to promote high test scores, students' happiness and behavior in math class, and their self-efficacy in math.

Question # 1:	Question # 2:	Question # 3:
To what extent do <b>individual teachers</b> affect students' attitudes and behaviors in class?	To what extent do <b>specific teaching practices</b> affect students' attitudes and behaviors in class?	Are teachers who are effective at raising test-scores <b>equally effective</b> at developing positive attitudes and behaviors in class?

### What did they Find?

Teacher practices influenced students' test scores, behavior, self-efficacy in math, and happiness in math class.	<ul style="list-style-type: none"> <li>Teacher emotional support increased student self-efficacy in math and happiness in class.</li> <li>Classroom organization improved students' behavior, however it was associated with less happiness during math class.</li> </ul>	Practices that improved test scores and behavior in class did not improve students' happiness in class.
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### Why is it important?

- Math classrooms characterized by student misbehavior and unhappiness are less likely to promote students' learning and self-efficacy in math. Math mastery is an important factor in the trajectory toward college readiness. In addition, standardized test scores are important for the evaluation of schools; so school staff should be concerned about teaching strategies that contribute to better math performance.

### What can School Social Workers Do?

- Social workers can share with teachers the strategies found in the study about how to promote student self-efficacy in math, good behavior, and happiness in class. Math teachers who are having trouble with student behavior or engagement in class may benefit from hearing the results of the study.** Teachers can be encouraged to pay attention to emotional support and classroom organization because they support positive outcomes for students. However, the negative effects of classroom organization on happiness may require efforts to modify classroom organization efforts to promote positive emotions.

### How was the study done?

The study was done by the National Center for Teacher Effectiveness (NCTE). Classrooms were studied between 2010 – 2013. Teachers were 4<sup>th</sup> and 5<sup>th</sup> grade general education teachers in four medium to large school districts on the east coast. Classes were videotaped, teachers completed questionnaires, and student outcome data were reviewed. About 68% of students in the study were eligible for free or reduced price lunch, 14% were in need of special education services, and 16% had limited English proficiency, 39% African American, 39% Hispanic, and 28% White.